

**Amendments to the Claims:**

The following Listing of Claims replaces all prior versions and listings of the claims in this application.

**Listing of the Claims**

1. (Currently Amended) An oligonucleotide structure<sub>2</sub> comprising  
a first strand of nucleic acid and a second strand of nucleic acid, the first and second strands being hybridized to each other in a duplex section, and  
at least two hydrophobic anchoring moieties capable of being attached to a lipid membrane,  
wherein a terminal end of the first strand is not part of the duplex section and is free from a hydrophobic moiety<sub>2</sub> ~~and~~  
wherein the hydrophobic anchoring moieties are covalently attached to adjacent terminal ends of the first and second strands, respectively, and  
wherein the oligonucleotide structure is immobilized to a surface by binding to a surface-immobilized linker or by binding to a lipid membrane-attached linker.

2. – 4. (Cancelled).

5. (Previously Presented) An oligonucleotide structure according to claim 1, comprising at least one additional strand, wherein each additional strand is provided with a terminal hydrophobic anchoring moiety, wherein a first additional strand is hybridized to said second

strand and wherein any second or greater additional strand is hybridized to the preceding additional strand.

6. (Previously Presented) An oligonucleotide structure according to claim 1, wherein the two strands are hybridized to each other in the duplex region in a manner that leaves the first strand free to hybridize with a third strand.

7. (Previously Presented) An oligonucleotide structure according to claim 6, wherein said second strand has hydrophobic anchoring moieties in both terminal ends.

8. (Previously Presented) An oligonucleotide structure according to claim 7, wherein said third strand has a terminal hydrophobic anchoring moiety so first and third strands have adjacent hydrophobic anchoring moieties.

9. (Previously Presented) An oligonucleotide structure according to claim 1, wherein the hydrophobic anchoring moieties are selected among steroids, fatty acids, hydrophobic peptides and lipids.

10. (Previously Presented) An oligonucleotide structure according to claim 9, wherein the hydrophobic anchoring moieties are cholesterol or a derivative thereof.

11. (Previously Presented) An oligonucleotide structure according to claim 1, wherein each hydrophobic anchoring moiety is spaced apart from the duplex section by a spacing group or a sufficient number of non-hybridized nucleic acid units.

12. - 13. (Cancelled).

14. (Previously Presented) An oligonucleotide structure according to claim 1, wherein the first strand is longer than the second strand, and said first and second strands have a duplex region involving the terminal end of the second strand.

15. (Previously Presented) An oligonucleotide structure according to claim 8, wherein the first strand has essentially double the amount of nucleic acid monomers than the second strand, and said first and second strands each have a cholesterol molecule attached to their free 5' and 3'-ends, respectively.

16. (Previously Presented) An oligonucleotide structure according to claim 1 comprising a section of peptide nucleic acids (PNA) capable of forming PNA-peptide complexes.

17. (Previously Presented) An oligonucleotide structure according to claim 9, wherein the first strand is 30-mer DNA; and the second strand is a 15-mer DNA having 12 complementary bases.

18. (Withdrawn) A lipid vesicle comprising an oligonucleotide structure according to claim 1 attached to its lipid membrane.

19. (Withdrawn) A lipid vesicle according to claim 18 comprising electrochemically detectable reporter molecules.

20. (Withdrawn) A lipid vesicle according to claim 18 comprising biologically active compounds exhibiting biological functionality.

21. (Withdrawn) A lipid vesicle according to claim 20, wherein said biologically active compound is a membrane protein.

22. (Cancelled).

23. (Withdrawn and Currently Amended) A biosensor including a surface immobilized oligonucleotide structure according to claim 1 ~~43~~.

24. (Withdrawn) A method of forming a lipid membrane attached linker, comprising contacting an oligonucleotide structure according to claim 1 having two or more hydrophobic anchoring moieties with a lipid membrane, thereby accomplishing a direct attachment of said oligonucleotide structure by said moieties at adjacent sites on the same membrane.

25. (Withdrawn) A method according to claim 24, wherein said membrane forms a lipid vesicle.

26. (Withdrawn) A method according to claim 24 wherein said membrane is a bilayer membrane.

27. (Withdrawn) A method according to claim 24, wherein said attachment is irreversible.

28. (New) An oligonucleotide structure, comprising  
a first strand of nucleic acid and a second strand of nucleic acid, the first and second strands being hybridized to each other in a duplex section, and  
at least two hydrophobic anchoring moieties covalently attached to adjacent terminal ends of the first and second strands, respectively, and capable of attaching at adjacent sites on a lipid membrane,  
wherein a terminal end of the first strand is not part of the duplex section and is free from a hydrophobic moiety, and  
wherein the oligonucleotide structure is a linker available for binding to the lipid membrane.